

WHAT IS CLAIMED IS:

1. A system comprising:
a source of gas, the gas including NO_x; and
filter material including a catalyst and an alkali for reducing levels of NO_x in the
gas.
2. The system of claim 1, wherein the alkali is coated on support particles,
and wherein the coated support particles are mixed with the catalyst.
3. The system of claim 1, wherein the catalyst is coated on particles of the
alkali.
4. The system of claim 1, wherein the alkali is coated on particles of the
catalyst.
5. The system of claim 1, wherein the catalyst and alkali are layered.
6. The system of claim 1, wherein the filter material further includes
chromium oxide.
7. The system of claim 1, further comprising air conditioning apparatus
downstream the filter material.
8. The system of claim 1, further comprising a first support structure for the
catalyst and a second support structure for the alkali, the first and second structures
being spaced apart.
9. The system of claim 8, wherein the catalyst and alkali are independently
optimized.

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19. Apparatus comprising
a CATOX; and
a split layer PTF including a catalyst integrated with the CATOX and an alkali downstream from the catalyst, the catalyst oxidizing NO to NO₂, the alkali adsorbing the NO₂.

20. An environmental control system comprising:
a CATOX;
an air conditioning system (ACS) downstream the CATOX; and
a post treatment filter downstream the CATOX, the filter including a catalyst and an alkali.

21. The system of claim 20, wherein the catalyst is midstream between the CATOX and the ACS, and the alkali is downstream the ACS

22. A method of reducing harmful agents in air, the method comprising:
passing the stream of air through a CATOX to oxidize organic agents, TICs and TIMs to carbon dioxide and water;
passing the stream through a catalyst, the catalyst including manganese dioxide;
and
passing the stream through an alkali.

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